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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/788,684 Filing Date: February 27, 2004 Appellant(s): SCHERER ET AL.

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GROUP 2800

Melanie G. Gover For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 27, 2006 appealing from the Office action mailed on February 28, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,371,813

Ramey et al.

4-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramey et al. (USPN 6,146,202).

As per claim 1, Ramey discloses in figs. 1 and 15 an electrical header connector 400 comprising: a header body 402 having an internal surface 422 and an external surface 424, the header body including a plurality of first openings 416 and a plurality of second openings 418 extending from the internal surface to the external surface; and a plurality of shield blades 406 configured for insertion into the plurality of second openings 418, each of the plurality of shield blades having at a first end 462 thereof a generally right angle shielding portion 428 configured to be disposed adjacent to a corresponding one of the pluralities of signal pins 404. Ramey does not explicitly disclose that the first ends 462 of the plurality of shield blades 406 are substantially coplanar with the internal surface 422 of the header body. Ramey does disclose in fig. 15 that the first ends 462 extend from the external surface 424 through throat portions 440, 442 to the internal surface 422. Thus, it is clear and known to one skilled artisan that the first ends 462 may be positioned a distance above or below the plane of internal surface 422; the distance above or below the plane of internal surface 422 is depending on the height of the first ends 462 and the thickness of the header body 402. Therefore, it is well known and well established to one skilled artisan that the first ends 462 of the plurality of shield blades are substantially coplanar with the internal surface of the

header body 402. In any event, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to ensure the distance extending not to far out from the internal surface 422 and extending far enough to provide an interference and cross talk shield or to ensure the first ends 462 extending through the external surface 424 to the closer of the internal surface 422 so that the right angle shielding portion 428 is securely placed in the second openings 418.

As per claims 2-6, Ramey discloses a plurality of signal pins 404 configured for insertion into the plurality of first openings 416 to form an array of pin contacts 426 extending from the internal surface 422 of the header body; wherein the first and second openings 416, 418 are arranged in the header body such that the generally right angle shielding portions 428 of the plurality of shield blades 406 substantially surround the plurality of signal pins 404 to form a coaxial shield around each of the plurality of signal pins; wherein the plurality of signal pins and the plurality of shield blades are retained in the header body by press-fit; wherein the generally right angle shielding portion of each of the plurality of shield blades includes first and second leg portions 430,432 and wherein each of the plurality of second openings 418 in the header body has a generally right angle shape for receiving the generally right angle shielding portion 428 of a shield blade (figs. 15, 15a, 16, and col. 12, line 45 to col. 13, line 45).

As per claim 7, Ramey discloses that each of the plurality of generally right angle second openings 418 includes first and second narrowed throat portions 440,442 dimensioned to engage the first and second leg portions 430,432 of the generally right

angle shielding portion 428 of a shield blade to hold the shield blade in place (fig. 16, col. 13, lines 19-33).

As per claims 8-9, Ramey discloses that each of the plurality of generally right angle second openings 418 in the header body includes a central portion 434 coupled to the first and second end portions 436,438 by the first and second narrowed throat portions 440,442; the central portion and the first and second end portions of each of the plurality of generally right angle second openings are shaped to provide an air gap 444 surrounding the generally right angle shielding portion of a shield blade (fig. 16, col. 13, lines 19-37).

As per claims 10-12, Ramey discloses that each of the plurality of shield blades 406 has a second end 464 thereof extending beyond the external surface of the header body, the second end configured for engagement with a printed circuit board 34; wherein the plurality of shield blades 406 are formed in a continuous strip of material; wherein the continuous strip of material forming the plurality of shield blades further comprises at least one tail 448 configured for engagement with a printed circuit board34. (figs. 15, 15a, 16, and col. 12, line 45 to col. 13, line 65).

As per claim 13, Ramey discloses the invention substantially as claimed except for one tail for every two shield blades. It would have been obvious to one of ordinary skill in the art to have one tail for every two shield blades in order to save material.

As per claims 14-16, Ramey discloses that the continuous strip of the shield blades comprises a plurality of tails spaced along the continuous strip of material forming the plurality of shield blades; wherein the plurality of tails are electrically

connected to a common ground (ground trace in pcb 34); wherein at least a portion of the plurality of shield blades are formed in a continuous strip of material (figs. 15, 15a, 16, and col. 12, line 45 to col. 13, line 65).

(10) Response to Argument

Attention is hereby directed to the ground of rejecting claim 1, supra. Appellant argues that Ramey does not provide a motivation or suggestion for shield blades that are coplanar with the internal surface of the header body. The examiner would like to point out that the instant claim 1 recites wherein the first ends of the plurality of shield blades are substantially coplanar with the internal surface of the header (emphasis added); a review of the instant specification (page 5, lines 11-12) indicates that the first ends can be positioned above or below the plane of internal surface. Thus, the claim language "wherein the first ends of the plurality of shield blades are substantially coplanar with the internal surface of the header" can be interpreted that the first ends of the plurality of shield blades are being placed somewhat above or below the plane of internal surface. Fig. 15 of Ramey et al shows the first ends 462 extend from the external surface 424 through throat portions 440, 442 to the internal surface 422. Thus, it is clear and known to one skilled artisan that the first ends 462 may be positioned a distance above or below the plane of internal surface 422; the distance above or below the plane of internal surface 422 is depending on the height of first ends 462 and the thickness of header body 402. Therefore, it is well known and well established to one skilled artisan that the first ends 462 of the plurality of shield blades are substantially coplanar with the internal surface of header body 402.

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Further, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to ensure the distance extending not to far out from the internal surface 422 and extending far enough to provide an interference and cross talk shield, so that the socket connector 100 of the two-part electrical connectors (socket connector 100 and header connector 400) is compact; and further, it would have been obvious to one of ordinary skill in the art to ensure the first ends 462 extending through the external surface 424 to the closer of the internal surface 422 so that the right angle shielding portion 428 is securely placed in the second openings 418.

Furthermore, the test for obviousness under 35 U.S.C. 103 does not require an express suggestion of the claimed invention in any or all references; rather, the issue is to be solved based upon what the collective teachings of the reference(s) would have suggested to the artisan. Leinoff v. Louis Milona & Sons, Inc., 726 F.2d 734, 220 USPQ 845 (Fed. Cir. 1984); In re Keller, 642 F. 2d 413, 208 USPQ 871 (CPA 1981); In re McLaughlin, 443 F. 2d 1392, 170 USPQ 209 (CCPA 1971). An express statement in a reference suggesting the modification is not necessary in order for a claimed invention to have been rendered obvious. Cable Electric Products, Inc., 770 F. 2d 1015, 226 USPQ 881 (Fed. Cir. 1985). The applicant fails to credit the artisan with any skill at all. In re Sovish, 769 F. 2d 738, USPQ 771 (Fed. Cir. 1985).

And furthermore, it appears that applicant reads and relies on the different sections of the Ramey reference (i.e., col. 13, lines 6-18; col. 15, line 61-64; col. 7, line 57-61; Fig. 22) than the examiner relies on for the ground of rejecting claim 1 (i.e., Fig. 15 and the description of Fig. 15 thereof).

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Since applicant does not specifically point out how each of the dependent claims

2-16 is patentable over Ramey et al, the examiner should not further elaborate at this

time. Therefore, the rejections of claims 2-16 as stated in the ground of rejection, supra

are herein incorporated and should be confirmed along with rejecting the independent

claim 1.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

X. Chung-Trans

Conferees:

P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER

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